

UFG 08-1349

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SOLARIS BOX WITH THERMAL LID AND TAMPER-PROOF CLASPS
(Folienbox mit integrierter Klappe und Originalitätsverschlüssen)

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UNITED STATES DEPARTMENT AND PROSECUTOR OFFICE
Washington, D.C. February 24th

Translated by: Schneider Translations, Inc.

Publication Country	(10):	DE
Document Number	(11):	10015053
Document Kind	(12):	21
Publication Date	(43):	2001-03-27
Application Number	(51):	10015053.0
Application Date	(52):	2000-03-28
International Classification	(54):	B65B 5/16, B65B 5/48
Priority Country	(33):	
Priority Number	(31):	
Priority Date	(32):	
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Applicant(s)	(71):	Belvedere AG, Hamburg, Federal Republic of Germany
Designated Contracting States	(81):	
Title	(55):	POUCHES BOX WITH INTERLOCK AND TAPPER-PROOF CLOSURE
Abstract Title	(56a):	Faltaschen mit Interlockriegel und Fingerringverschluss

Soluble Box with Integrated lid and Tear-Off Flange

A closable tuboid Soluble box 1 with a front wall 11, a rear wall 12, a left wall 13 that encloses the front wall 11 and the rear wall 12, as well as a right wall 14, a bottom closure 20 formed by four hinged closing tabs 21, 22, 23, 24, an upper closure 30 formed by four closing tabs 31, 32, 33, 34, wherein

- a groove 40 is integrated into the front wall 11 by means of a weakening line or tear-off line 41, 42;

- a flap 15 of which the wall 11 containing the flap 40 is articulated;

- the weakening or tear-off line 41, 42 is provided in the flap 15 in the weakening or tear-off line 411, 421;

- the flap 15 is connected to the wall 14, especially by means of glued points and/or surfaces 152, 153;

- the weakening or tear-off line 411, 421, which is a continuation of the flap 15, issues up to the outer edge located opposite to the linkage, and the connections to the wall 14, especially the glued points and/or surfaces 152, 153, are located outside of the area 111 enclosed by the weakening or tear-off line 410, 420, that is, above and below the weakening or tear-off line 411, 421.

Boxdesign

The invention concerns a foldable cuboid suitable to contain a liquid, solid, or gaseous substance, with a front wall, a rear wall, a right wall and opposite the front wall and the rear wall, as well as a left wall, a bottom closure formed by the two bottom closing tabs, a lid closure formed by two closing tabs, as well as a flap introduced into the front wall by means of weaving or tear-off lines, on which it is articulated as a flap, which is considered as a wrap-around closure.

Apur from the considerations concerning the ecological point of view, the considerations regarding the configuration of a receptacle of a product from the ecological point of view, which are always in the foreground, have been acquiring ever greater importance, especially with regard to foldable boxes. At the same time, an effort is being made to simplify the material use in the production of foldable boxes and to design surface-optimized punched-out drawings.

Single foldable boxes are already known. They are made of cardboard or paper. The measurements of the foldable box are generally greater than those of the product, so that a specific surface is available on the foldable box to inform the customer about the product or simply attract the customer's attention by means of a suitable appearance.

Many different embodiments of foldable boxes with tear-off lock-to flaps are known. In order to prevent an unauthorized opening of the filled box, it is likewise known to close the flaps of foldable boxes with secondary or sealing labels at the lips. In order to open the box, the label that prevents an unauthorized opening and is permanently connected to the box is torn off. This leads frequently to the fact that the lock-to flaps are damaged when the latter is torn off, especially in packages for the pharmaceutical industry, which requires reclosable boxes. The packaging machines that close the box most like comprise a labeling station, which works slower due to the sealing process than the other boxes that come from the other processing stations. Such additional unit is one more possible disruption factor. In addition, it is known that flaps that completely or partially overlap each other must be glued to each other in order to prevent an opening of the box without authorization. With the opening procedure, these flaps are separated from each other. As a rule, they are damaged to such an extent that they can no longer be refixed by the user.

To this is added that such reclosable foldable boxes do not have, due to the foldable sections, a hanging element with a hanging device, such as slotted hole or round hole, integrated into the foldable sections in order to provide a possibility for hanging the filled foldable box to store shelves. In order to provide these

foldable boxes with a hanging element, it is therefore known to give a product part as hanging element in an additional work step on the rearward wall surface of the box, which is provided with the corresponding hanging device. The additional giving of such a hanging element on the already finished box or on the foldable element then forms the box requires an additional work step and this requires thus an additional material expenditure when the hanging element is configured at the same time as the foldable element is produced.

DE 2837441 A1 discloses a foldable container consisting of a front and a rear wall as well as two walls that connect the rear wall with the front wall, a bottom part, and an upper closing part. wherein the closing part is articulated on an insertable tab via a retaining flap, which is arranged, in turn, above a weakening line in the rear or front wall and can be torn out of it. However, this foldable box does not offer any possibility for opening it in any way in a box.

DE 4103055 A1 likewise shows a foldable closed foldable box. This foldable box consists of a rear wall formed by an outer wall part and an inner wall part, a front wall, two walls connecting the front and rear walls, a bottom closure and an upper closure, wherein the outer wall has a hanging element with a correspondingly shaped

hanging device, such as, for example, a round or slotted hole, in the upper area.

A similar foldable box is disclosed by DE 18941604 A1. The foldable box consists of a front wall, a rear wall, a right wall that connects the front and rear walls, as well as a left wall. The right wall has a bottom closure formed by four bottom closing tabs and an upper closure formed by four closing tabs, in which two closing tabs of the upper closure and two bottom tabs of the bottom closure are mutually joined. In addition, a tear-off flap is integrated in the rear wall, which is held up across of a weakening line or tear-off line in the front wall or the rear wall, and which is connected via a folding line to a closing tab of the upper closure or to a bottom closing tab of the bottom closure. To the foldable box is provided at least one inner rear wall, and namely when the tear-off flap is located in the rear wall. To the case in which the tear-off flap is located in the front wall, an intermediate wall and an inner wall connecting to the intermediate wall are articulated thereto.

In the area of the rear wall that is not provided with a tear-off flap, a first hanging element with a hanging device, such as a slanted or round hole, is articulated on a plane formed by the rear wall. At the same time, a second hanging element with a hanging device, such as a slanted or round hole, is pushed out of the same area of the front wall or in the rear wall and sticking free for

joining line between the inner rear wall and the closing cap, in which the closing tab articulated on the inner rear wall has a greater width at the joining line than the second joining element.

In US 1978003 A2 is shown a reclosable tuboid foldable box, which has a front wall, a rear wall, a right wall that connects the rear wall and the front wall, as well as a left wall, and furthermore a closure consisting of four closing tabs, a lid closure formed by four bottom closing tabs, in which two closing tabs of the lid closure are glued to each other. In this foldable box, a tear-off flap is articulated on the front wall or on the rear wall by means of a weakening or tear-off line. On the bottom closing cap it

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generally provides a joined point, which joins together the bottom closing cap and the tear-off flap to the finished foldable box.

US 19871087 A1 likewise shows a reclosable tuboid foldable box with a front wall, a rear wall, a right wall that connects the front and rear walls, as well as a left wall, a bottom closure formed by four closing tabs, in which two closing tabs can be mutually glued, with a tear-off flap that is articulated to the front or rear wall, which is held by means of a weakening or tear-off line in the front wall or the rear wall and is articulated to the lid cap on a closing tab of the upper closure or on a bottom closing tab of the bottom closure, as well as with at least one inner wall, on which if

required an intermediate wall and an inner wall that is articulated to the intermediate wall, wherein a cover is integrated in the front wall or the rear wall by means of two weakening or tear-off lines and is reversibly glued by means of at least one glued point.

From DE 20000078 A1 is known a foldable blister card for repeated use, whose front and rear skins are linked via a folding line. On the front side it also glues a cap, which serves for accommodating a product, for example, a chipstick.

The closure of the foldable blister card is carried out by applying several glued points to the front or rear wall, which are made of a pressure-sensitive adhesive.

From the state of the art are generally also known foldable boxes in which a cover is separated to one of the sides by means of tear-off lines. The tear-off lines are configured therein in such a way that openings are introduced on the front side and offset and parallel thereto on the rear side of the foldable box wall. If the cover is now torn open, the foldable box material separates between the two partial sections in the direction of the foldable box wall, so that a layer remains on the cover as well as also on the basic structure of the box. These layers form one on top of the other when the flap is closed and seal the interior from the outside.

A fundamental disadvantage of these box covers is that seal-deep incisions must be introduced on the front as well as on the rear side

of the foldable box wall. During production, the punched box blank must then either remain in order to be inserted into the setting work, or it must also be introduced from above as well as also with a tension.

It is an object of the invention to make available a foldable tuboid foldable box, which can be economically and hygienically produced with the least possible material consumption, which allows a comfortable removal of the package content and has, at the same time, a neeple-proof closure, which can be easily and rapidly produced with the aid of machines, filled, and closed, and whose folding line is configured as one piece together with, if required, as integrated neeple

At the same time, the box should have a cover that hangs over the opening when the box after the package has been more open for the filling time and thus additionally seal the box. The punched box blank should be configured in such a way that a processing is only necessary from one side.

The object to which the invention is based is obtained by means of the teaching of the main claim. Advantageous embodiments are represented in the dependent claims. In addition, the invention comprises a punched box blank for the production of a particularly advantageous foldable box according to the invention.

The rectangular cardboard foldable box 1 consists essentially of a front wall 11, a rear wall 12, a left wall 13 that connects one front wall 11 and the rear wall 12, as well as a right wall 14, also a bottom piece 20 formed by four bottom closing tabs 21, 22, 23, 24, and an upper piece 30 formed by four closing tabs 31, 32, 33, 34. A cover 40 is integrated into the front wall 11 by means of weakening lines 41, tear-off lines (41, 42). On the wall 11 that contains the cover 40 is articulated a flap 15. The weakening or tear-off lines (41, 42) are continued in the flap 15 (41', 42'). The flap 15 is connected to the wall 14 by means of glued points on its surfaces (152, 153). The weakening or tear-off lines (41', 42') that are continued in the flap 15 lead up to the outer edge of the flap 15 opposite to the articulation, and the glued points on its surfaces (152, 153) are therefore located outside of the area 115 enclosed by the weakening or tear-off lines (41', 42'), that is, above and below the weakening or tear-off lines (41', 42'), whereby a tamper-proof closure is produced.

Up to the tamper-proof closure, the walls of the foldable box are made in one layer, with the exception of the provided closure points. In this way, overall very little material is utilized for the configuration of the foldable box.

The inner part 115 of the flap can be separated from the outer part, which is glued to the wall 14, by means of weakening or tear-

all lines 44, 45; in the flap 14 and can be opened together with the cover 40 by likewise separating the cover 40 from the front wall 11 by means of the weakening or tear-off lines 44, 45.

By means of the described opening, it is possible to create a large access opening through the front and rear side of the box, so that individual parts can be perfectly removed without additionally removing unwanted parts of the content of the box, and a return of the removed contents into the box is also possible. For example, a card together with the remaining labels can be removed from the box after removing individual labels from a card.

The cover 40 preferably extends over the entire width of the front wall 11.

The cover 40 is also preferably placed in the manner on the front wall 11.

In order to stabilize the foldable box, it is advantageous to glue together two or several closing tabs 46, 51 of the upper closure 36 and/or two or several bottom closing tabs 42, 57.

An expansion 48 can be formed in the rear wall 12 in the area of the top closure 36, which has a protruding 49, such as, for example, a slightly rounded hole. With the aid of this protruding, the foldable box can be hung on the usual hooks attached to store shelves and can thus be very practically offered to the customer.

In a further preferred embodiment of the foldable box, a hanging flap 51 is articulated on the expansion 121 via a folding line 511, on which a closing tab 52 is articulated via a folding line 521, while a punching 512, such as, for example, a slot or round hole, is provided in the hanging flap 51.

The punching 122 has characteristically greater dimensions in the rear wall than the punching 512 in the hanging flap 51, and namely in order to ensure that, despite the inaccuracy that cannot be avoided during the folding procedure of the foldable box, which is caused by the not completely overlapping punchings, the requirements for the dimensioning of the opening are fulfilled.

Furthermore, the expansion 121 and the hanging flap 51 can be joined together in order to increase the stability of the hanger of the variable box formed from the two parts.

By means of this configuration, the box can be offered in the usual store shelves provided with hooks. The embodiment with a hanger, which is composed by two hanging flaps (made of two layers of material), offers the advantage that the hanger is characterized by a great stability, so that it also withstands great tensile stress without being at fear that a tearing-off will occur. A firm connection is preferred in particular when the two hanging flaps are glued to each other, which can also be attractive in appearance.

By means of the integration of the advantageous hanger in the folding section of the foldable box, the entire production of the foldable box with double-layer hanger can be carried out within one work step. A subsequent and thus unnecessarily complicated gluing of a tongue on the otherwise finished box is avoided.

In order to provide the customers with the possibility of removing the hanger without problems after purchase and without damaging the box, the folding line 571 can be staged as a weakening or tear-off line between the hanging flap 11 and the closing tab 12 articulated to the hanging flap, and the expansion 121 can be generated from the remaining rear wall 17 by means of a weakening or tear-off line.

The hanger can thus be suitably separated without danger of tearing the foldable box.

In a very advantageously configured box, a viewing window 18 can be run out from the cover 10, which can be covered by means of a transparent film. In this way, the content of the box can be presented to the customer, without having to open the box, and the product can be at least directly represented without having to get up with the costly danger of a prying of the package.

In order to reclose the once opened package, the foldable box is configured in such a way in a particularly advantageous manner that the flap 11 on a part of the flap 13 and an incision 144 in the

wall 14 are shaped so that they match each other, so that the foldable box can be sealed in the incision 141 by inserting the flap 15 in a part of the flap 15.

It is advantageous according to the invention to configure the weakening or tear-off lines 161, 162 for forming the flap 15 in the form of perforated lines 1611, 1612 and uninterrupted incisions 1612, 1611 running parallel thereto, wherein the cutting depth is less than the thickness of the foldable box wall.

It is furthermore very advantageous to separate the foldable box wall in the areas 1611 and 1612 of the folding line 161, which are respectively located between the perforated lines 1611 or 1612 and the incisions 1612 or 1611.

The previously described advantageous embodiment is described in more detail below without causing an unnecessary limitation thereof.

When weakening line 161, 162 for the configuration of the cover is formed by means of a perforated line 1611 or 1612 and an uninterrupted line 1612 or 1611 running parallel thereto ("tear-off separation"). The intersecting lines divide therein not the entire box wall, but the perforation depth is less than the thickness of the foldable box wall. As a rule, only the wall located on the outside of the box is weakened, but the inner side of the foldable box wall can be just as well provided with the perforated incisions 1611, 1612.

Each perforated line 411, 421, is continued 413, 423 over the joining line 151 in the flap 15. The foldable non-perforated is completely separated in the steps 1511 and 1512 (refer to Fig. 1) between the perforated lines 411 or 421 and the intersecting lines 413 or 423.

Figs. 1a and 1b show a schematic of the situation ahead of the first opening of the foldable box (Fig. 1a) or with the foldable box (Fig. 1b) open at one of the two weakening or tear-off lines 411. The flap 15 is not depicted for reasons of clarity.

If the cover 30 is first opened from the side of the flap 15 (right side of Figs. 1a and 1b), the foldable box wall between the perforated line 411 and the intersecting line 413 is split into two layers A and B in the direction of the plane of the wall of the foldable box (indicated in a plane 1 parallel to the foldable non-perforated). On the outer box side (upper side of Figs. 1a and 1b), the foldable box wall is separated at the intersecting line 413, while the perforated line 411 rips at the inner foldable box wall (lower side of Figs. 1a and 1b). This has as a consequence that the layer A on the outer side of the foldable box wall remains on the cover 30, while the layer B remains on the inner side of the foldable box wall of the basic box structure 100. (The reverse applies in the case of the intersecting line located on the inner side of the

foldable box walls. The same situation is present at the weakening or tear-off line 42.

When the box is closed, the two layers A and B again overlap, so that no gap is produced between the cover (44) and the basic box structure (100) when the box is restored. The box has therefore the appearance of not having been opened, on the one hand, while on the other hand, the content is better protected against penetrating dust and dirt.

It is particularly advantageous when the length of the perforation strip 2 and the dimensions of the sewing web 3 are adapted to the configuration of the foldable box material and to the making of the foldable box wall ("controlled perforation"). By means of the controlled perforation for the purpose of the operation, it is ensured that the foldable box material is split in the plane of the wall of the foldable box and the two layers A and B tear in the manner described above.

In this way, with a box material that is too compact and perforation cuts that are too long, it can be prevented, for example, that the perforated line is clipped open over the entire foldable box thickness and that the foldable box wall is split within the wall plane, or that the box rips completely at the intersection of the intersecting line when the perforated ribbon are too short and the

the webs are too long. The layers that determine the superaqueous envelope of the box would also not be produced in this case.

The invention concerns, in addition, the punched box blank for the production of a foldable box disclosed in the claims.

In addition, the foldable box can be machine processed, that is, it is possible to fully automatically give it from the punched box blank, apart from the aid of a customary cutter, fill it with the desired product, and likewise give the upper closure according to the process described below. In this way is obtained a technique packaging that provides a protective against dust for the products located in the interior of the foldable box. One essential advantage of the shown foldable box is that the sections to be applied can be introduced from one side. It is not necessary to rotate the punched box blank during the setting procedure or to utilize means, such as a punching die, as in the case of sheet and web partially perforated punched box blanks. In this way are reduced, for example, the production costs and if applicable the production time. Already existing production equipment, for example, which is only able to apply webs from one side of the punched box blank, can continue to be used.

A particularly advantageous embodiment of the foldable box including the punched box blank will be explained in more detail in

the following without the intention of creating a limitation to the foregoing. In the drawings.

Fig. 1 shows the blank original punched box blank of the essentially advantageously configured foldable box;

Fig. 2 shows a schematic representation of the bookkeeping or two-fold lines with closed cover (Fig. 2a) and open cover (Fig. 2b); and

Fig. 3 shows a frontal view of the completely finished and closed foldable box.

In Fig. 1 is shown the punched box blank 10 of the foldable box 1. The punched box blank 10 can be made from cotton, cardboard, or another suitable material. The basic structure of the erected foldable box 1 is comprised of the front wall 11, the rear wall 12, the left wall 13 that encompasses the front wall 11 and the rear wall 12, the right wall 14, as well as a flap 15, which is articulated on the front wall 11. In order to close the basic structure of the box, the flap 15 is glued to the right wall 14.

All of the walls 11, 12, 13, 14 have a rectangular shape, but the front wall 11 and the rear wall 12, which preferably have the same dimensions, are somewhat wider than the other two walls 13, 14, which preferably have likewise identical dimensions.

The individual walls 11, 12, 13, 14 as well as the flap 15 are connected to each other via corresponding folding lines 101, 102, 103, 104.

Two weakening or tear-off lines 41, 42 in the form of perforated lines 411, 421 are introduced in the front side wall 12 parallel to the folding lines 111, 112 and incisions 413, 423 running parallel to these are supplied. The incision 417 is located in the foldable box wall between the perforated line 411 and the folding line 111, and the incision 422 is located between the perforated line 421 and the folding line 113. The cutting depth of the incisions is less than the thickness of the folding box material. The weakening or tear-off lines are provided in the flap 15 (413, 423) and define a trapezoidal part 116 therefrom, which serves as closure flap. The side of the flap 15 located opposite to the cover 40 is shaped in such a way that it can serve as an insertable tongue. The flap 16, and thereby also the cover 40, are first pulled in order to open the foldable box 1, whereupon the weakening or tear-off lines 413 and 423 and furthermore the weakening or tear-off lines 41 and 42 designed as indicated above are cut through, so that a part 116 of the flap 15 as well as the cover 40 are separated from the foldable box 1.

When the tear-off flap 116 is removed, the upper and lower ends of the flap 15 (the parts of the flap 15 that do not belong to the

flap 117) remain attached to the wall 14 by means of the glued points 102, 103.

After splitting the flap 117 and the cover 40, the flap 117, or an especially formed part of this flap, represents a form of closure with an insertable tongue that is usual for this type of package. A correspondingly shaped incision 144 in the wall 14 ensures the necessary cohesion of the replaceable box.

The cohesion of the replaceable box can be considerably improved by means of the correspondingly configured insertable tongues with a preferred configuration according to the invention in comparison with the usual elastic materials. Such an advantageous insertable tongue according to the invention is created by means of a curved flap 20 whose left and right ends are located in separate areas (refer to Fig. 1, flap 117).

From the cover 40 of the front wall 11 can be pushed or cut a viewing window 50, which can be covered or not with a transparent film or another transparent material when the box is finished.

The entire closure 20 is composed of the four closure tabs 21, 22, 23, 24, which are fixed by means of folding lines 117, 122, 123, 124 to the corresponding walls 11, 12, 13, 14. A further bottom closure tab 25 is likewise articulated on the bottom closure tab 21, if required via the folding line 111, which functions as an insertable tongue. The bottom closure tab 25, which is articulated

on the front wall 11, as well as the bottom closing tab 22, which is articulated on the rear wall 12, have preferably a semi-circular shape. The length or height of the bottom closing tabs 21 and 22 correspond to the width of the two narrower walls 13, 14. On the two narrower walls 13, 14 are articulated two further bottom closing tabs 23, 24 via the folding lines 134, 144, which taper toward their free ends and have an essentially trapezoidal configuration. In order to close the upper closure 25, the two bottom closing tabs 23, 24 and the bottom closing tab 22 are folded inwardly at an angle of 90°, the bottom closing tab 22 and function as an insertable tongue in being inserted if required into the main structure of the foldable box 1, whereby an increased protection of the bottom closure 25 against the penetration of dust or other type of contaminating particles is provided.

The upper closure 25 is formed by four upper closing tabs 31, 32, 33, 34, of which three are correspondingly linked via the folding lines 111, 113, 142 to the walls 11, 13, 14. The fourth upper closing tab 32 is linked to the hanging flap 15 via the folding line 121. The two upper closing tabs 31, 33 are folded inwardly at first

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at an angle of 90° and then joined together in order to provide the box 1. The upper closing tab 34 has preferably the same shape and dimensions as the two bottom closing tabs 21, 22, the upper closing

top 52, instead, is preferably somewhat shorter than the rear closing tab 51. The rear bottom closing tabs 53, 54 preferably have also the same shape and dimensions as the rear bottom closing tabs 23, 24.

An expansion 171, in which a punching 182 is punched, is present directly on the rear wall 12. The expansion 171 can be linked via a weakening or tear-off line 121 to the rear wall 12 and can have an essentially rectangular shape. The punching 182, which preferably represents a combination of either a round hole, or preferably a combination of either a round hole and a rectangular hole, is provided centrally in the center of area of the expansion 171, so that a so-called burrhole results, which makes possible a secure but at the same time also flexible placement of the filled soluble top 1 in a store shell provided with a corresponding hook.

A hanging flap 51 is linked in the expansion via a folding line 511, which has the same shape and dimensions as the expansion 121, and in which is provided a punching 512 likewise centrally from the center of surface of the punching 182 is merely somewhat smaller than the punching 182. The hanging flap 51 is rotated at an angle of 180° with relation to the expansion 171, so that when the hanging flap 51 is bent over the folding line 511, the hanging flap 51 and the expansion 171 overlap in such a way that the two punchings 182, 512 are preferably congruently arranged. The hanging flap 51 and the

expansion 111 are precisely glued to each other, which increases the stability.

The hanging flap 51 starts directly at the binding line 511, which can have razor-cut-like punch-throughs. All of the four corners of the hanging flap 51 and the expansion 121 can also have an identical quarter-circle rounded configuration for a visual configuration.

In order to provide for the possibility of storing the foldable box 1 in a particularly space-saving way, the folding line 521 can be configured as a weakening or tear-off line. If the weakening or tear-off line 111 is then additionally pushed into the rear wall 12, a removal of the hanger followed by the hanging flap 51 and the expansion 111 is possible without damaging the rest of the foldable box 1.

Any suitable adhesive can be used as adhesive materials.

In Fig. 3 is represented the finished and closed foldable box 1 in a schematic front view as it is delivered to the customer, who will then store it in turn in a shell provided with a corresponding notch and can thus advantageously close it for sale. The figure does not claim to portray the exact dimensions.

The perforated lines (111, 401) and the intersecting lines (112, 113) are emphasized for reasons of clarity. These lines can be

hardly seen in the finished box before the first opening by the end connector.

Boxing Gaining

1. A rectangular instead foldable box 1 with a front wall 11, a rear wall 12, a left wall 13 that connects the front wall 11 and the rear wall 12, as well as a right wall 14, a hollow closure 20 formed by four hollow closing tabs 21, 22, 23, 24, an outer closure 30 formed by four closing tabs 31, 32, 33, 34, wherein:

- a cover 40 is integrated into the front wall 11 by means of a weakening line or tear-off line (41, 42);
- a flap 15 on which the wall 11 containing the flap 40 is articulated;
- the weakening or tear-off lines (41, 42) are continued in the flap 15 in the weakening or tear-off line (41b, 42b);
- the flap 15 is connected to the wall 14, especially by means of glued points and/or surfaces (102, 103);
- the weakening or tear-off lines (41b, 42b), which are a continuation of the flap 15, lead up to the outer edge located opposite to the lid edge, and the connection to the wall 14, especially the glued points and/or surfaces (104, 105), are located outside of the area 11b enclosed by the weakening or tear-off lines (41b, 42b), that is, above and below the weakening or tear-off line (41b, 42b).

2. The foldable box of one of the preceding claims, wherein the cover 40 extends over the entire width of the front wall 11.

3. The foldable box of one of the preceding claims, wherein the cover 40 is placed in the corner of the front wall 11.

4. The foldable box of one of the preceding claims, wherein the two joining tabs 31, 32 of the upper closure 30 are glued to each other and/or two bottom joining tabs 21, 22 are glued to each other.

5. The foldable box of one of the preceding claims, wherein an expansion 171, which has a opening 122, is formed in the area of the upper closure 30 of the rear wall 12.

6. The foldable box of claim 5, wherein a hanging flap 51, on which a closing tab 52 is articulated via a sliding line 531, is articulated on the expansion 171 via a folding line 511, where a opening 512 is present in the hanging flap 51.

7. The foldable box of claim 6, wherein the opening 122 has larger dimensions than the opening 512 in the hanging flap 51.

8. The foldable box of one of the preceding claims, wherein the expansion 171 and the hanging flap 51 are glued to each other in the finished foldable box 1.

9. The foldable box of one of the preceding claims, wherein a viewing window 60, which can be covered by means of a transparent film, is cut into the cover 40.

10. The foldable box of one of the preceding claims, wherein the flap 15 is on a part of the flap 13 and an incision 144 in the wall 14

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are adapted to each other in shape, so that the foldable box can be closed by inserting the flap 15 on a part of the flap 13 into the incision 144.

11. The foldable box of one of the preceding claims, wherein the opening on each of the lines 41, 42 for turning the cover 39 are configured in the shape of perforated lines (411, 421) and interrupted arcs (412, 422) running parallel thereto, while the cutting depth of the arcs (412, 422) is less than the thickness of the wall of the folding box.

12. The foldable box of claim 11, wherein the foldable box wall is split in the areas 1511 and 1512 of the folding lines 411, 421 and the areas are located between the perforated lines 411 or 421 and the arcs (412) or (422), respectively.

13. A packaging for the protection of a releasable expandable bag with a front wall, a rear wall, a right wall that connects the front wall and the rear wall, as well as a left wall, a flap articulated on the front wall, a bottom closure formed by four bottom closing tabs, a cover closure formed by four closing tabs, wherein

h) a foldable tab 7 is made of cotton, cardboard, or another suitable material;

h) the front wall 11, the rear wall 12, the side wall 13 that connects the front wall 11 and the rear wall 12, the front wall 11, and the flap 14 articulated on the front wall 11 are arranged one after the other in a straight line and are linked by means of a folding line 111, 112, 113, 114;

h) in an expansion 121 having a punching 122 is formed in the area of the cover closure 10, if required via a weakening or tear-off line 123 on the rear wall 12, and

ii) a bottom closing tab 22 is articulated on the opposite side via a folding line 124.

a) a hanging flap 51 is articulated on the expansion 121 via a folding line 511, on which a closing tab 52 is articulated via a folding line 521, while a grommet 53 is provided in the hanging flap 51;

e) in a closing tab 33 is provided via a folding line 133 on the left wall 13 that connects the front wall 11 and the rear wall 12, and

iii) a bottom closing tab 23 is articulated on the opposite side via a folding line 134;

h) i) a closing tab 71 is articulated on the front wall 11 via a folding line 111, and

- 11) a bottom closing tab 21, on which a bottom closing tab 21' is articulated via a folding line 21'', is articulated on the opposite side via a folding line 112;
- 12) a closing tab 34 is articulated on the right wall 14 via a folding line 142, and
- 13) a bottom closing tab 34 is articulated on the opposite side via a folding line 143;
- 14) the wall 14 is provided with an incision 144;
- 15) the weakening or tear-off lines 41, 42, each divide a cover 40 in the front wall 11, are provided in the front wall 11,
 - a) the weakening or tear-off lines are formed from
 - a) two perforated lines 411 and 412, as well as
 - b) two cuts 421, 422, whose depth is less than the thickness of the foldable box wall, which are parallel thereto between the perforated lines 411 and the folding line 111 or between the perforated line 421 and the folding line 112;
 - c) the perforated lines 411, 422 continue into the flap 13 and divide there on area 135 within the flap 13;
 - d) the foldable box wall is split in the areas 1311 and 1312 of the folding line 111, which is located between the perforated lines 411 or 421, and the cuts 412 or 422; and
 - e) a slitting window 43 is cut out from the cover 40,

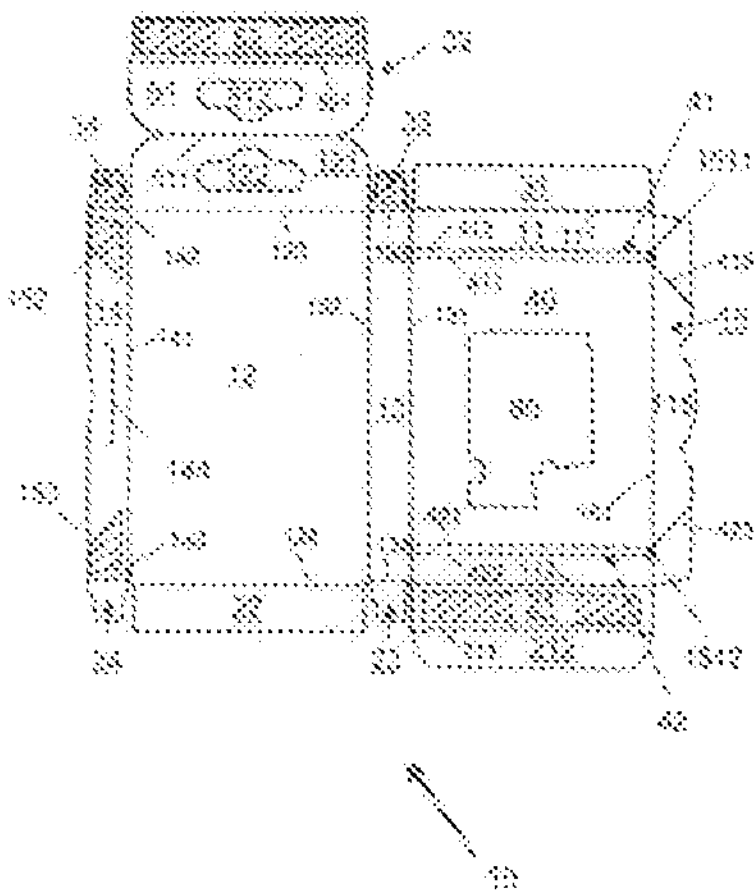


Fig. 1

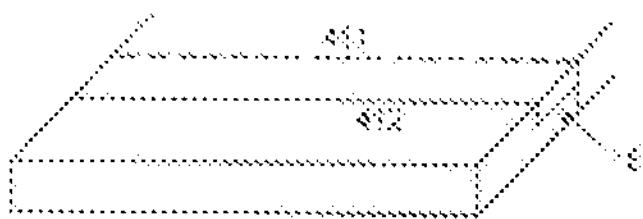
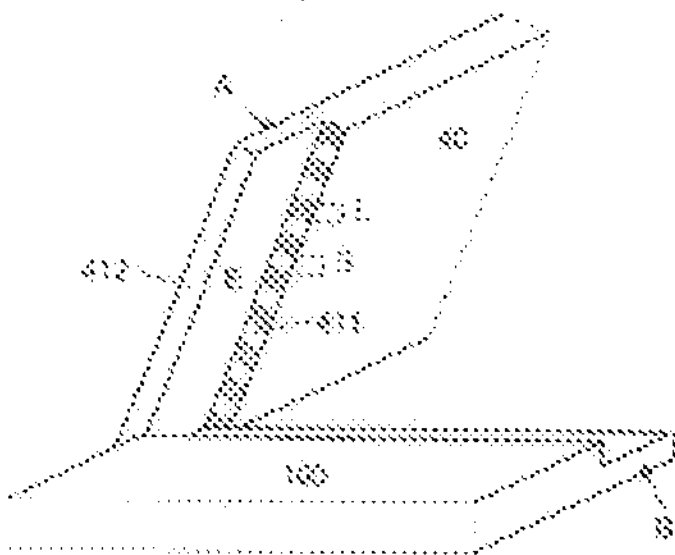


Fig. 28.



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